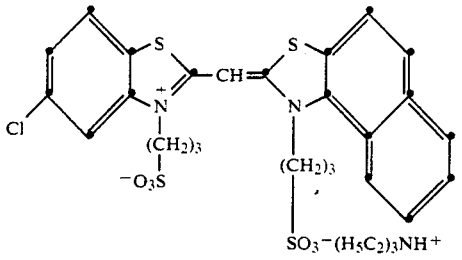
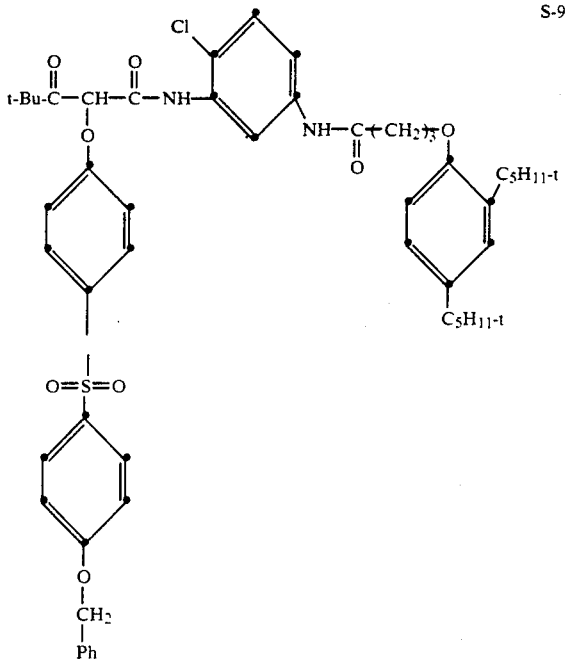
S-8



S-9



The dried coatings were exposed sensitometrically to a 3000K tungsten source for 0.1 second through a step tablet ranging in optical density from 0 to 4 units. Processing was done through a standard Kodak RA4 process. The logarithms of the relative speeds were determined at a density of 1.0 above fog. The sensitometric responses are given below.

TABLE V

Sensitizer	Log Rel. Speed	Contrast
0.63 mg $Na_3Au(S_2O_3)_2$—$2H_2O$ (Comparison)	158	193
0.30 mg $Na_2S_2O_3$—$5H_2O$, 0.79 mg compound 1 (Invention)	167	211

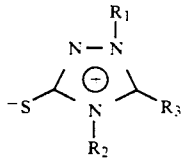
It is seen from this data that a compound of the present invention used in combination with one molar equivalent of sulfur sensitizer results in a higher contrast compared to sensitization with aurous dithiosulfate, which inherently contains two equivalents of the sulfur sensitizer thiosulfate.

The invention has been described in detail with particular reference to preferred embodiments thereof, but it will be understood that variations and modifications can be effected within the spirit and scope of the invention.

What is claimed is:

1. A gold (I) compound of the formula $AuL_2^+X^-$ wherein:

L is



R_1 is CH_3

R_2 is CH_3, $CH_2CH{=}CH_2$, $CH_2CH_2OCH_3$, NH_2, C_4H_9, C_6H_{11} or C_6H_5

R_3 is CH_2 or C_6H_5; and

X^- is BF_4^-, I^-, Br^-, or Cl^-.

2. The compound of claim **1** wherein

R_2 is CH_3,

R_3 is CH_3, and

X^- is BF_4^-.

3. The compound of claim **1** wherein

R_2 is $CH_2CH{=}CH_2$,

R_3 is CH_3, and

X^- is BF_4^-.

4. The compound of claim **1** wherein

R_1 is CH_3,

R_2 is $CH_2CH_2OCH_3$,

R_3 is CH_3, and

X^- is BF_4^-.

5. The compound of claim **1** wherein

R_1 is CH_3,

R_2 is HH_2,

R_3 is CH_3, and

X^- is BF_4^-.

6. The compound of claim **1** wherein

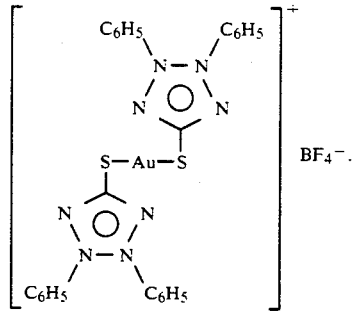
R_1 is CH_3,

R_2 is C_6H_5,

R_3 is C_6H_5, and

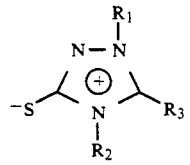
X^- is BF_4^-.

7. A gold(I) compound of the formula



8. A gold(I) compound of the formula $AuL(L^1)^+X^-$ wherein:

L is



and

R_1 is CH_3,

R_2 is CH_3 or $CH_2CH{=}CH_2$

R_3 is CH_3

$L^1{=}P(CH_3)_3$

X^- is Cl^- or BF_4^-.

* * * * *